Pretest Procedures:

Before performing the Method 9, the observer should first discuss the details of the "affected facility" with the facility contact to confirm that it is subject to subpart OOO, and that the notification requirements have been met (see above). The observer should bring a camera to photograph the facility, a clipboard, blank EPA Visible Emissions forms (VE forms), blank paper for notes, extra pens, and a compass or a map. Mineral extraction facilities usually require safety gear including safety shoes, hard hat, safety glasses, ear protection and a high visibility safety vest.

The details of the crushing or grinding operation should be discussed with the contact, such as the type of material being processed (bank run gravel, ledge, etc.), the process rate in tons per hour and whether controls are in place and operating. These details should be noted on the VE forms.

Method 9 Observations:

EPA Method 9 must be used to determine compliance with the fugitive opacity standard. Initial compliance is determined using a total time of observation for each affected facility of three (3) hours (30 6-minute averages). Readings are taken every 15 seconds in increments of five percent opacity. The duration of the Method 9 observations when determining compliance with the fugitive emissions standard may be reduced from three (3) hours to one (1) hour (10 6-minute averages) if the following conditions apply:

1. there are no individual readings greater than ten percent (10%) opacity; and
2. there are no more than three (3) readings of ten percent (10%) for the one-hour period.

There are four other requirements when measuring fugitive emissions. First, the minimum distance between the observer and the emission source must be fifteen (15) feet. Second, the observer shall, when possible, select a position that minimizes interference from other fugitive emission sources (e.g., road dust). Third, the observer must stand in the required observer position relative to the sun (observer-to-sun angle sector of 140º). Try to make all observations perpendicular to the direction of the plume whenever possible. Finally, if an operator uses wet dust suppression for particulate matter control, the spray can generate a visible mist. This mist is not particulate matter emissions and is not considered visible emissions. If such water mist is present, the observation of emissions must be made at a point in the plume where the mist is no longer visible. When the wet dust suppression system is operated, continue to record opacity at this point but note all such observations on the data sheet. During data reduction, eliminate any such observations from any 24-observation (6-minute) set.

The observer should fill out as much of the Visible Emission form as possible before the start of the initial opacity compliance test. At a crusher, the observer must take observations at the crusher inlet, crusher outlet, and crusher discharge onto a belt conveyor. If belt conveyors are being observed, emissions from the crusher discharge **onto** a belt conveyor should **not** be considered **when** the observer measures emissions **from** the belt conveyor. For belt conveyors, opacity measurements must be done at the transfer points **to** and **from** the belt conveyor and during operation of the conveyor. However, if the transfer point is to a storage pile, then no opacity observation is required. Screening operations may be controlled for fugitive emission by wet suppression systems. Opacity observations should be made at the point of maximum opacity in the plume.

Approved Alternative Test Methods for Fugitive Emissions:

If emissions from two or more facilities continuously mix or combine together so that the opacity of fugitive emissions from an individual facility cannot be read, the operator can use one of two alternative

test procedures. First, the operator can determine the highest fugitive opacity standard applicable to one of the individual facilities and use it as the standard for the combined emission stream. The highest fugitive opacity standard must be Federally enforceable. Also, Method 9 opacity observations must use the point of highest opacity whether it is from a single or combined plume. Second, the operator can separate the emissions so that the opacity of emissions from each individual facility can be read. Emissions can be separated by constructing a physical barrier or by shutting down the facility that is interfering. This can be done as long as the maximum achievable production rate (capacity) of the facility being tested is not affected and shutting down the interfering facility does not cause operational problems.

Alternative Testing Procedure for Application of Method 9 to Multiple Emission Points:

EPA has approved an alternative procedure where a single visible emission observer may conduct visible emission observations for up to three subpart OOO fugitive emission points within a 15-second interval. Use of this alternative procedure is subject to the following limitations:

1. No more than three emission points are read concurrently.
2. All three emission points must be within a 70º viewing sector or angle in front of the observer such that the proper sun position can be maintained for all three points.
3. If an opacity reading for any one of the three emission points is within 5 percent opacity of the applicable Federal standard, then the observer must stop taking readings for the other two points and continue reading just that single point. (No reading greater than 10%.)

Testing Procedure for Application of Method 9 or Method 22 to Emission Points in Buildings:

If any transfer point on a conveyor belt or any other affected facility is enclosed in a building, then each enclosed affected facility must comply with the emission limits in paragraphs (a) and (b) of 40 CFR, § 60.672, using Method 9, OR the building enclosing the affected facility or facilities must comply with the emission limits in paragraph (e), using Method 22 as cited in 40 CFR, § 60.675(d).

Completing the VE Forms:

The observer should review the forms for completeness, sign and date the forms on the bottom once the VE readings are finished. The results of the initial opacity compliance test must be forwarded to Bureau of Air Quality's Regional Compliance Inspector within 30 days.

Who do I call if I need further information regarding NSPS?

Call DEP's Bureau of Air Quality at (207) 287-2437

- Licensing Section – NSPS notification and applicability questions
- Enforcement Section – testing questions
- Compliance Section – procedural questions

RECORD OF VISUAL DETERMINATION OF OPACITY – MULTIPLE POINTS

Company_____

Location_____

License No._____

Date_____

Type of Facility_____

Control Device_____

Hours of Observation_____

Observer_____

Observer Certification Date_____

Source Layout Sketch

Observer Affiliation_____

Description of Equipment Observed in this Test

Observed Facility (crusher, screen, etc.)	Max. Rated Capacity *	Operating Capacity	Emission Point(s) (# corresponds to Points 1,2 or 3 on Observation Record)	Fugitive Opacity Standard (%)	EPA Method (9 or 22)

Observation Information

	INITIAL			End of Hour 1			End of Hour 2			FINAL		
	Point 1	Point 2	Point 3	Point 1	Point 2	Point 3	Point 1	Point 2	Point 3	Point 1	Point 2	Point 3
Clock Time												
Observer Location 1 Distance to Discharge 2 Direction from Discharge 3 Height of Observation Point												
Plume Description 1 Color 2 Visible Length												
Background Description												
Other Information												
Weather Description 1 Wind Direction 2 Wind Speed 3 Ambient Temperature												
Sky Conditions (clear, overcast, % clouds, etc.)												

_____

Observer's Signature

I certify under penalty of law that, based on information and belief formed after reasonable inquiry, I believe the information included above and on the following _____ pages is true, complete, and accurate.

Readings ranged from _____ % to _____ % opacity

This facility WAS / WAS NOT in compliance with license conditions.

Summary of Average Opacities				
Set Number	Time		Opacity	
	Start	End	Sum	Average
1				
2				
3				
4				
5				
6				
7				
8				
9				
10				
11				
12				
13				
14				
15				
16				
17				
18				
19				
20				
21				
22				
23				
24				
25				
26				
27				
28				
29				
30				

MULTIPLE POINT OBSERVATION RECORD

Page_____of_____

SET #	Hour	Min	Seconds												Comments
			0			15			30			45			
			Pt 1	Pt 2	Pt 3	Pt 1	Pt 2	Pt 3	Pt 1	Pt 2	Pt 3	Pt 1	Pt 2	Pt 3	
1		**0**													
		1													
		2													
		3													
		4													
		5													
2		**6**													
		7													
		8													
		9													
		10													
		11													
3		**12**													
		13													
		14													
		15													
		16													
		17													
4		**18**													
		19													
		20													
		21													
		22													
		23													
5		**24**													
		25													
		26													
		27													
		28													
		29													

MULTIPLE POINT OBSERVATION RECORD (continued)

Page_____of_____

SET #	Hr	Min	Seconds												Comments
			0			15			30			45			
			Pt 1	Pt 2	Pt 3	Pt 1	Pt 2	Pt 3	Pt 1	Pt 2	Pt 3	Pt 1	Pt 2	Pt 3	
6		**30**													
		31													
		32													
		33													
		34													
		35													
7		**36**													
		37													
		38													
		39													
		40													
		41													
8		**42**													
		43													
		44													
		45													
		46													
		47													
9		**48**													
		49													
		50													
		51													
		52													
		53													
10		**54**													
		55													
		56													
		57													
		58													
		59													

MULTIPLE POINT OBSERVATION RECORD (continued)

Page_____of_____

SET #	Hour	Min	Seconds												Comments
			0			15			30			45			
			Pt 1	Pt 2	Pt 3	Pt 1	Pt 2	Pt 3	Pt 1	Pt 2	Pt 3	Pt 1	Pt 2	Pt 3	
11		**0**													
		1													
		2													
		3													
		4													
		5													
12		**6**													
		7													
		8													
		9													
		10													
		11													
13		**12**													
		13													
		14													
		15													
		16													
		17													
14		**18**													
		19													
		20													
		21													
		22													
		23													
15		**24**													
		25													
		26													
		27													
		28													
		29													

MULTIPLE POINT OBSERVATION RECORD (continued)

Page_____of_____

SET #	Hr	Min	Seconds												Comments
			0			15			30			45			
			Pt 1	Pt 2	Pt 3	Pt 1	Pt 2	Pt 3	Pt 1	Pt 2	Pt 3	Pt 1	Pt 2	Pt 3	
16		**30**													
		31													
		32													
		33													
		34													
		35													
17		**36**													
		37													
		38													
		39													
		40													
		41													
18		**42**													
		43													
		44													
		45													
		46													
		47													
19		**48**													
		49													
		50													
		51													
		52													
		53													
20		**54**													
		55													
		56													
		57													
		58													
		59													

MULTIPLE POINT OBSERVATION RECORD (continued)

Page_____of_____

SET #	Hour	Min	Seconds												Comments
			0			15			30			45			
			Pt 1	Pt 2	Pt 3	Pt 1	Pt 2	Pt 3	Pt 1	Pt 2	Pt 3	Pt 1	Pt 2	Pt 3	
21		**0**													
		1													
		2													
		3													
		4													
		5													
22		**6**													
		7													
		8													
		9													
		10													
		11													
23		**12**													
		13													
		14													
		15													
		16													
		17													
24		**18**													
		19													
		20													
		21													
		22													
		23													
25		**24**													
		25													
		26													
		27													
		28													
		29													

MULTIPLE POINT OBSERVATION RECORD (continued)

Page_____of_____

SET #	Hr	Min	Seconds												Comments
			0			15			30			45			
			Pt 1	Pt 2	Pt 3	Pt 1	Pt 2	Pt 3	Pt 1	Pt 2	Pt 3	Pt 1	Pt 2	Pt 3	
26		**30**													
		31													
		32													
		33													
		34													
		35													
27		**36**													
		37													
		38													
		39													
		40													
		41													
28		**42**													
		43													
		44													
		45													
		46													
		47													
29		**48**													
		49													
		50													
		51													
		52													
		53													
30		**54**													
		55													
		56													
		57													
		58													
		59													